

CLAIMS

What is claimed is:

1. A transmitter for transmitting a plurality of signals at a plurality of modulations and frequencies comprising:

5 a signal configuration input for use by an operator to select signal configuration settings for transmitter signals;

a controller responsive to the signal configuration input for storing the selected signal configurations in memory locations;

a plurality of user inputs;

apparatus responsive to each user input for retrieving the signal configuration associated therewith; and

transmitter circuitry for transmitting the selected signal configuration received from the controller at a predetermined frequency.

2. A transmitter according to claim 1, wherein the plurality of user inputs comprises:

15 a plurality of user inputs each associated with a stored signal configuration.

3. A transmitter according to claim 1, wherein the signal configuration input further comprise:

a multi-position switch for selecting a type of transmitter that is to be emulated; and

20 a multi-position switch for selecting a code to be transmitted by the transmitter.

4. A transmitter according to claim 1, wherein the user inputs comprise:

a first switch capable of identifying to the controller the location of a first

signal configuration to be retrieved and transmitted; and

a second switch capable of identifying to the controller the location of a second signal configuration to be retrieved and transmitted.

5. A transmitter according to claim 1, wherein the transmitter circuitry comprises:

a single transmitter circuit for selectively transmitting a signal at one of a plurality of different frequencies.

6. A transmitter according to claim 5, wherein the single transmitter circuit further comprises a transmitter circuit selectively operable at frequencies of 300 MHZ, 310 MHZ and 390 MHZ.

7. A universal transmitter according to claim 1, wherein the transmitter circuitry comprises:

a first transmitter circuit capable of transmitting at a first predetermined frequency; and

a second transmitter circuit capable of transmitting at a second predetermined frequency.

8. A method of programming a universal transmitter comprising:

setting a signal configuration input to a first set of desired positions corresponding to a first signal configuration;

storing the first signal configuration into a first memory location;

setting the signal configuration input to a second set of desired positions corresponding to a second signal configuration;

storing the second signal configuration into a second memory location;

associating one of a plurality of user inputs with each stored signal configuration; and

receiving one of the plurality of user inputs and transmitting the stored signal configuration associated therewith.

9. A method of programming a transmitter comprising:

5 setting a signal configuration input to a first set of desired positions
corresponding to a first signal configuration;
 selecting a desired user input with which the first selected signal
configuration is to be associated;
 storing the first selected signal configuration into a first memory location;
 setting the signal configuration input to a second set of desired positions
10 corresponding to a second signal configuration;
 selecting a desired user input with which the second selected signal
configuration is to be associated; and
 storing the second selected signal configuration into a second memory
location.

10. A method of programming a transmitter including a plurality of multi-position
signal configuration switches comprising:

 setting the multi-position switches to a first set of desired positions
corresponding to a first signal configuration;
 selecting a desired user input during a first learn mode operation with
20 which the first selected signal configuration is to be associated;
 storing the first signal configuration into a first memory location;
 setting the multi-position switches to a second set of desired positions
corresponding to a second signal configuration;
 selecting a desired user input during a second learn mode operation with
25 which the second selected signal configuration is to be associated; and
 storing the second signal configuration into a second memory location.

11. A method according to claim 10, comprising:
depressing a predetermined user input for a predetermined period of time
in order to place the transmitter into a learn mode.

12. A method according to claim 10, comprising:
5 identifying from the selected multi-position switch settings a type of
transmitter to be emulated.

13. A method according to claim 10, comprising:
identifying from the selected multi-position switch settings a code format
to be transmitted.

14. A method according to claim 10, comprising:
10 identifying from the selected multi-position switch settings a modulation
format at which a signal is to be transmitted.

15. A method according to claim 10, comprising:
15 identifying from the selected multi-position settings a frequency at which a
signal is to be transmitted.

ABSTRACT OF THE DISCLOSURE

A universal transmitter capable of transmitting a plurality of signals at a plurality of different modulations and frequencies which provides a simplified programming setup so that multiple signal configurations (including code format, modulation format and frequency) can be programmed quickly and easily. The transmitter comprises a signal configuration input which an operator can use to select a desired signal configuration for transmission, a controller for interpreting the selected signal configuration, storing it to memory, retrieving it when the appropriate user input is depressed, and outputting it to a transmitter circuit capable of transmitting the selected signal configuration received from the controller at a predetermined modulation and frequency, and at least one user input for actuating the transmitter and identifying to the controller what signal configuration is to be transmitted by the transmitter.